(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization International Bureau



(43) International Publication Date 8 April 2004 (08.04.2004)

PCT

(10) International Publication Number WO 2004/028569 A1

(51) International Patent Classification⁷: 47/30

A61K 49/00,

(21) International Application Number:

PCT/GB2003/004075

(22) International Filing Date:

23 September 2003 (23.09.2003)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

02256647.5

25 September 2002 (25.09.2002) EP

- (71) Applicant (for all designated States except US): BIO-COMPATIBLES UK LIMITED [GB/GB]; Chapman House, Farnham Business Park, Weydon Lane, Farnham, Surrey GU9 8QL (GB).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): LEWIS, Andrew, Lennard [GB/GB]; Biocompatibles UK Limited, Chapman House, Farnham Business Park, Weydon Lane, Farnham, Surrey GU9 8QL (GB). REDMAN, Richard, Paul [GB/GB]; Biocompatibles UK Limited, Chapman House, Farnham Business Park, Weydon Lane, Farnham, Surrey GU9 8QL (GB). GARCIA, Pedro [GB/GB];

Biocompatibles UK Limited, Chapman House, Farnham Business Park, Weydon Lane, Farnham, Surrey GU9 8QL (GB).

- (74) Agent: GILL JENNINGS & EVERY; Broadgate House, 7 Eldon Street, London EC2M 7LH (GB).
- (81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: POLYMER COMPOSITIONS FOR ADMINISTRATION TO ANIMALS

(57) Abstract: Particulate embolotherapeutic compositions are described in which the particles comprise a matrix polymer expressing at surfaces available for interaction with biological molecules or, usually, blood cells, express zwitterionic groups, usually phosphoryl choline groups. The particles have suitable size and compressibility, for instance controlled by controlling the water content, for use in embolotherapy, by administration using catheters or hypodermic needles. The matrix polymer may be crosslinked. Preferably the particles are spherical. Examples are crosslinked polyvinylalcohol matrices coated with a crosslinkable copolymer formed of 2-methacryloyloxyethyl-2'-trimethylammoniumethyl phosphate inner salt with nonionic and crosslinkable comonomers. The coating is stabilised by crosslinking after coating from an organic solvent solution.